

### **REMARKS**

Claims 1, 4-14, 17-26, 28, 30-42, 44-51, and 53 were pending in the application and remain pending after the entry of the foregoing amendments. Claims 1, 4-7, 9-12, 14, 17-23, 26, 28, 37, 42, 51, and 53 have been amended. Claims 55-62 have been added. Claims 1, 4-14, 17-26, 28, 30-42, 44-51, 53, and 55-62 remain pending. No new matter has been added.

Applicant thankfully acknowledges the withdrawal of the § 112 rejections, as well as the § 102(b) rejections under U.S. Patent No. 6,87,252 (Lugo) and the § 102(e) rejections under U.S. Patent Application No. 2003/0060765 (Campbell).

### **Support for Amendments**

Independent device claims 1, 14, and 26 have been amended to recite in the preamble that the device is a “portable” device operable as one or more of a cellular phone, pager, and beeper. Similarly, independent method claims 28, 42, 51, and 53 have been amended to recite providing a “portable” multi-functional electronic communication and medical diagnostic device. Each of these claims had previously recited that the device could be operated as a “portable” electronic communication device, and support for the amendments can be found in the specification at least at paragraphs [0014], [0020], and [0033].

Claims 1, 14, 26, 28, 42, 51, and 53 have also been amended to make clear the distinction between the first and second modes of vibration of the vibratory component. Support for the clarifying amendments can be found in the specification at least at paragraph [0035].

Claim 1 has been amended to recite a mode selector and a display. Support for the amendments can be found in the specification at least in paragraphs [0035] and [0036], and in FIGS. 1 and 5.

Claim 4 has been amended to recite a selector being adapted to select one or more magnitudes of vibration. Support for the amendment can be found in the specification at least in paragraphs [0035] and [0036], and in FIGS. 1 and 5.

Claims 5-7 and 9-12 have been amended to conform with the amendments to claim 1.

Claim 14 has been amended to recite a probe for transmitting vibration from the vibratory component to a subject, and a display. Claim 14 has been further amended to recite the vibratory component generating vibration at a preprogrammed magnitude and frequency in the first mode and vibration at one or more of a selected magnitude and a selected frequency in the second mode. Support for the amendments can be found in the specification at least in paragraphs [0033], [0035], [0036], and [0038], and in FIG. 1.

Claims 17-23 have been amended to conform with the amendments to claim 14.

Claim 26 has been amended to recite that the component generates vibration at a standard paging or beeping magnitude or frequency in a second electronic communication mode of operation. Support for the amendment can be found in the specification at least in paragraph [0035].

Claim 37 has been amended to correct an informality.

Claim 55 has been added to recite a selector being adapted to select one or more frequencies of vibration. Support for the amendment can be found in the specification at least in paragraphs [0035] and [0036], and in FIGS. 1 and 5.

Claim 56 has been added to recite the device further comprising a probe. Support for the amendment can be found in the specification at least in paragraphs [0033] and [0038], and in FIG. 1.

Claim 57 has been added to recite that the probe projects outwardly from the device. Support for the claim can be found in the specification at least in paragraph [0038].

Claim 58 has been added to recite that the device is adapted to be applied to several extremities, one extremity at a time, including: a finger, a toe, a tibia, a wrist, and a face. Support for the claim can be found in the specification at least in paragraph [0033].

Claim 59 has been added to recite that the vibratory component comprises a motor, a vibrating head, and a shaft transmitting vibration from the motor to the vibrating head. Support for the claim can be found in the specification at least in paragraphs [0035] and [0038], and in FIG. 1.

Claim 60 has been added to recite that the motor is a DC motor and the shaft comprises an offset weight thereon. Claim 61 has been added to recite that the motor is a

piezoelectric transducer. Support for the claims can be found in the specification at least in paragraph [0039].

Claim 62 has been added to recite the device further comprising a mechanism for audibly indicating one or more of the magnitude of vibration and the frequency of vibration. Support for the claims can be found in the specification at least in paragraph [0036].

**35 USC § 103(a) Rejection (LaCourse in view of Mault)**

Claims 1, 4-14, 17-26, 28, 30, 32,34, 46-42, 44-47, 49, 51, and 52 stand rejected as obvious under U.S. Patent No. 5,002,065 (LaCourse) in view of U.S. Patent No 6,478,736 (Mault). Applicant traverses the rejections because this combination of references does not result in the claimed invention.

As an initial matter, Applicant respectfully points out that the Office Action incorrectly asserts LaCourse in view of Mault against an earlier version of the claims, contending that LaCourse discloses a “combination electronic communication and medical diagnostic apparatus.” Applicant respectfully points out that the claims were amended in the Response filed on May 22, 2007 to recite a “multi-functional electronic communication and medical diagnostic device.”

Additionally, the Office Action repeatedly emphasizes a “computer-based device/system,” despite the fact that none of Applicant’s claims recite a computer-based device or system. For example, the Office Action asserts that “LaCourse et al. disclose the apparatus being a computer base device” (Office Action at pages 2 and 4), that “Mault teaches a diagnostic computer based system” (Office Action at pages 3 and 4), that “Mault further teaches that in addition to being a computer based system” (Office Action at pages 3 and 4), and that Mault can be combined with LaCourse for “the predictable result of having a functioning computer based diagnostic system” (Office Action at pages 3 and 4). Applicant respectfully submits that all of these assertions are irrelevant to the pending claims. Indeed, these assertions call into question the applicability of the rejections, because the Office Action relies on “computer based system” as the common link on which to combine the teachings of the LaCourse and Mault references.

Regardless, the rejections fail to render the claimed invention obvious for other reasons, including, but not limited to, the fundamental reason that LaCourse and Mault do not disclose all of the elements recited in the claims.

Claims Recite a Multi-Functional Device having One Vibratory Component with Two Distinct Modes of Vibration

Independent claims 1, 14, and 26, and their respective dependent claims, recite a multi-functional device comprising a vibratory component for generating vibration in each of two distinct vibratory modes. Independent claims 28, 42, 51, and 53, and their respective dependent claims, recite a method with a first step of providing such a device. LaCourse does not disclose or teach a multi-functional device having a component adapted to generate vibration in two different modes, and Mault does not remedy this deficiency in LaCourse.

LaCourse does not disclose a multi-functional device having a component that can generate vibration in two modes, as recited in claims 1, 14, 26, 28, 42, 51, and 53. Rather, LaCourse discloses a single-mode device having a component (an electromagnetic coil) that is capable of generating vibration solely for use in medical diagnosis. The Office Action explicitly acknowledges that the LaCourse device cannot be used as an electronic communication device operable as one or more of a cellular phone, pager, and beeper. Office Action at page 2.

Further, Mault does not teach or even contemplate a vibratory component or any means for generating vibration. In particular, Mault makes no mention of vibration. Moreover, it cannot be asserted that the device taught by Mault inherently includes a vibratory component, because a person of ordinary skill in the art would understand that several of the exemplary devices suggested by Mault do not inherently include a vibratory component. For example, Mault teaches that the device (52) may be a portable computer, an e-book, a wristwatch with added functionality, a pedometer, or a desktop computing system, all of which are known by persons skilled in the art not to include vibratory components. Mault at col. 6, lines 15-20.

Still further, Mault does not teach a device operable in more than one distinct mode. It is apparent that the Mault device could operate as both a health management system and a

remote wireless electronic communication device simultaneously, i.e., a user could use the device to monitor metabolic rate and at the same time use the device as an e-book or cellular phone. In contrast, the Applicant's claimed device operates in two distinct selectable modes because it uses the same vibratory component to generate vibration in each of the two modes, i.e., a user of Applicant's device cannot be simultaneously used for diagnosing a medical condition and for generating vibration in response to a remote wireless electronic signal.

Thus, because LaCourse discloses a component for generating only one mode of vibration and Mault discloses no vibration in any of its nondistinct operating modes, the combination of LaCourse and Mault cannot render obvious claims 1, 14, and 26 (reciting a device comprising a component for generating two distinct modes of vibration) or claims 28, 42, 51, and 53 (reciting a method comprising providing such a component).

#### Claims Recite a Portable Device Applied to a Subject

Independent claims 1, 14, and 26, and their respective dependent claims, recite a portable device that can be applied to a subject for medical diagnosis. Independent claims 28, 42, 51, and 53, and their respective dependent claims, recite a method having a first step of providing such a device. LaCourse does not disclose a portable device that can be applied to a subject for medical diagnosis, and Mault does not remedy this deficiency in LaCourse. Further, it would not be obvious, in view of Mault, to make a portable device including the functionality of the LaCourse device.

In claiming a portable device, it is clear that Applicant intends "portable" to mean that the device is of a size and shape akin to a cellular phone, pager, or beeper, such as may be routinely carried by a health care professional (or anyone else). Specification at paragraphs [0020] and [0033]. A person of ordinary skill in the art at the time of the invention would understand "portable" in the context of a cellular phone, pager, or beeper, to be a device small and light enough to be carried, for example, in one hand, in a pants pocket or a shirt pocket, on a belt clip, or in a purse, briefcase, or other similar satchel.

In contrast, LaCourse teaches a large multi-component device including a test surface (1) onto which a subject's hand is placed, an extremity angle sensor (108), an electromagnetic coil/probe (3), a computer (102), a printer/display (103), and a keyboard

(110). It is readily apparent that the LaCourse device must be set up on a counter top, table, or other similar surface, and can therefore be used only in a stationary setting such as an office. The LaCourse device is undoubtedly not adapted to be ported around from place to place in the same manner as a cellular phone, pager, or beeper. LaCourse at col. 3, lines 26-47 and Figs. 1, 2, and 5.

Importantly, the portability of Applicant's claimed device provides new and unexpected results over the non-portable device of LaCourse. *See* MPEP 2144.04(V)(A). In particular, LaCourse is adapted to test neurological function only at a fingertip, while Applicant's claimed device can be readily applied to test neurological function at any part or extremity of a subject, including a finger, a toe, a tibia, a wrist, and a face. Specification at paragraph [0033]. Therefore, Applicant's portable device can perform functions that the LaCourse device cannot.

Further, Mault does not disclose a portable device that is both adapted to be applied to a subject and operable as a remote wireless communication device such as a cellular phone, pager, or beeper. Rather, Mault teaches use of the portable device (52) only as a computational device that is electronically linked to a separate calorimeter (10), the calorimeter (10) being applied to a subject.

Thus, because neither LaCourse nor Mault teaches a portable device that is, or can be, applied to any extremity of a subject, the combination of LaCourse and Mault cannot render obvious the claimed device as recited in claims 1, 14, and 26, or the claimed method as recited in claims 28, 42, 51, and 53.

In sum, the combination of LaCourse and Mault fails to disclose all of the elements of Applicant's claimed invention, as recited in claims 1, 14, 26, 28, 42, 51, and 53. Therefore, for at least the foregoing reasons, claims 1, 14, 26, 28, 42, 51, and 53 are novel and non-obvious over LaCourse in view of Mault.

Additionally, claims 4-13 depend from claim 1, claims 17-25 depend from claim 14, claims 30-41 depend from claim 28, and claims 44-50 depend from claim 42. Therefore, without prejudice to their individual merits, claims 4-13, 17-25, 30-41, and 44-50 are

patentable over LaCourse in view of Mault for at least the same reasons as claims 1, 14, 28, and 42, respectively.

Accordingly, Applicant respectfully requests that the § 103 rejections of claims 1, 4-14, 17-26, 28, 30, 32, 34, 36-42, 44-47, 49, 41, and 53 under LaCourse in view of Mault be withdrawn.

**35 USC § 103(a) Rejection (LaCourse in view of Mault further in view of Laudadio)**

Claims 31, 33, 35, 48, and 50 stand rejected as obvious under U.S. Patent No. 5,002,065 (LaCourse) in view of U.S. Patent No 6,478,736 (Mault) further in view of U.S. Patent No. 5,931,793 (Laudadio). Applicant traverses the rejections because this combination of references does not result in the claimed invention.

As discussed above, the combination of LaCourse and Mault fails to disclose all of the elements of Applicant's claimed invention, as recited in claims 1, 14, 26, 28, 42, 51, and 53. Laudadio does not remedy the deficiencies in LaCourse and Mault.

Claims 31, 33, and 35 depend from claim 28, and claims 48 and 50 depend from claim 42. Therefore, for at least the foregoing reasons, and without prejudice to their individual merits, claims 31, 33, 35, 48, and 50 are novel and non-obvious over LaCourse in view of Mault further in view of Laudadio.

Accordingly, Applicant respectfully requests that the § 103 rejections of claims 31, 33, 35, 48, and 50 under the combination of LaCourse, Mault, and Laudadio be withdrawn.

**New Claims**

Newly added claims 55-62 depend from claim 1 and recite combinations of features not disclosed in any of the references of record in the application. Accordingly, Applicant respectfully requests that claims 55-62 be allowed.

**CONCLUSION**

Applicant respectfully submits that the application is in condition for allowance. Withdrawal of all rejections, and allowance of the application, including claims 1, 4-14, 17-26, 28, 30-42, 44-51, 53, and 55-62, is respectfully requested. An early notice of allowance is earnestly solicited.

Respectfully submitted,

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